## How to Calculate Emissions

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#### **Emission Factors**

- A representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.
- Emission factors provide emission estimates from various sources of air pollution.
- EPA AP-42 website (<a href="http://www.epa.gov/ttnchie1/ap42/">http://www.epa.gov/ttnchie1/ap42/</a>)
- AP-42 has been published since 1972 as the primary compilation of EPA's emission factor information.
- If available, stack test emission factors are more accurate and preferred over AP-42 emission factors



#### Tools on Our Website

Our website (airquality.mecknc.gov) compiles many resources for you, including:

MCAQ Emissions Workbook



• Emission Calculation Spreadsheets



Informational Video on submitting Annual Emissions Report







10 questions that represent some of the most common questions we see in MCAQ that require follow-up for additional information during emissions report reviews

Did you check the reporting condition in your permit to determine what information needs to be submitted in the report?

2. Are all emission sources included?

3. Have you provided the supporting documentation about how you came up with the final emission numbers (i.e. hours run, product usage by piece of equipment, fuel usage, type of fuels used, emission factors, VOC content, etc.)?

4. Did you specify if particular emission sources didn't operate during the year?

5. If emissions numbers vary greatly from the previous year's emissions, did you provide additional details about any changes at the facility or reasoning behind the emissions changes?

6. Did you provide the facility total hours of operation for the year?

7. Did you use the most up-to-date versions of the emission spreadsheets?

8. Are the control efficiencies used in your calculations the same as those that were submitted in the application unless there has been a more recent testing event? There are default efficiencies available that are available to be used if no stack testing data.

9. Did you compare emission numbers to previously submitted monthly/quarterly/semiannual reports to make sure they correspond?

10. Did you account for any time your control devices were down and calculate emissions as uncontrolled during that time?

# Questions?

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